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ABSTRACT

This paper discusses the challenges facing teacher education programs to produce highly sensitive student teachers who are motivated to reflect on their own work, to develop during the preservice process and later as teachers within the professional frame of reference, and to capture a coherent picture of the course of professional development. Data were gathered from the fourth-year course students (n=80) during their final practice using interviews conducted as a social-communicative process by a second evaluator. The data were classified into five sections: (1) how capable student teachers were in conceptualizing and analyzing their own practice and behavior: (2) how they studied different roles; (3) how conscious they were of their practical theories; (4) how capable they were in reflection or utilization of experiences; and (5) how they saw educational situations as a whole. Their ability to analyze and self-evaluate was moderate. Most had not integrated personal experiences and beliefs into a valid basis for action. The reflection of experience was the most salient part in their professional development. They linked theoretical thinking and their personal view into a holistic vision. (Contains 28 references.) (CK)

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LEARNING TO BE A REFLECTIVE TEACHER
Experiences during the final practice of preservice
ATEE - conference, Oslo, 3. - 8.9.1995

1. INTRODUCTION

Very many, fast and significant changes in our society require a new orientation to teaching as a profession, and a broader view to school culture. The quality of learning and professional knowledge are essential components in the education of student teachers during preservice.It depends on the philosophical orientators also on the content and the structure and the quality of curriculum and most of all on the way how these are implemented in Education. The student teachers themselves should also become conscious of their professional development and how it can be hindered by their own unprocessed unconscious beliefs and assumptions (Knowles at al, 1994).

The challenging questions of Teacher Education are: Have we succeeded in our Teacher Education program in producing sense-making student teachers of high level, and how to get students to reflect on their own work and to develop during the of preservice process and further later as teachers to make the professional frame of referenc? And how to get a more or less coherent picture of the course of professional development and to learn to capture some features in the evolution of professional growth among student teachers (compare Kagan, 1992).

Each of us are products of our life-long personal experiences, which come to represent powerful arguments in many different and complex ways. We cannot deny the power differential between the influences of experience prior to and demanding preservice programs. Also the process produced by education is very essential as well as the way in which student teachers conceptualize practice teaching and the role of a teacher. The challenge is to find out ways of understanding the influences on developing and emerging practices (Knowles et al, 1994).

2. THEORETICAL BACKGROUND

The literature of teacher's professional development has been earlier characterized by intense activity. In the eighties Rowe & Sykes (1989) emphasize positive changes in student **confidence** and particularly in **self-perceptions**. Smylie (1988), too, indicated that changes in professional

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development are a direct function of teachers' professional perceptions (i.e. personal teaching efficacy). It is crucial also for determining the effects of in-service teacher training (Rowe & Sykes, 1989). When the results of self-perception were examined in in-service programs the findings suggested that the first dimension: **energy, enthusiasm** and **satisfaction** related indicators were the most consistent and salient concerns of teachers' professional self-perception. It accounted for 47,2% of the total variance. The professional growth literature of the 80's has been called by Kagan (1992) the learning-to-teach literature.

Fullan (1993) clarifies commitment with professional development as the most essential: listening and articulating one's own needs in her work. She suggests four capacities for professional teachers: personal vision building (ethical commitment), inquiry (developing awareness of alternatives), mastery (pedagogical knowledge) and collaboration (improving conditions of learning at school).

Niemi et Kohonen (1955) label almost the same components as a cyclic process: 1) professional commitment to enhance growth, 2) collaboration, 3) professional autonomy, promoting autonomy shifts away from passive learning and 4) dynamic learning concept (self-knowledge). This is a very holistic way to design the new professionalism. The process of development howewer does not follow the same tracks or order in every student's case.

Calderhead, who listed six aims of reflecting teaching, emphasized amon others the following ones:
- to enable teachers to analyze, discuss, evaluate and change their own practice
- to encourage teachers to take responsibility for their own professional growth
- to facilitate their own theories in use of educational practice
- to empower teachers to influence future directions (Calderhead, 1993)

By becoming an inquiring, reflective teacher we understand in education the high quality of the professional. The education itself is a mind-making process (Eisner, 1993). Critically reflective education of professionals take charge of their own high level further development.

There is argued that the degree of consciousness of the student teachers about one's practical theory (theories-in-use) is one of the key factor in professional growth. This ever-changing system of knowledge in addition to experiences and values are inner most relevant to teaching practice. All teachers have a practical theory for teaching whether they have any professional training for it or not. Practical theory, which is not reserved only for certificated teachers, will form according to Handal, Lauvås, 1987, a basis which influences what the student teachers actually do in their own practice.

3. RESEARCH PROBLEMS

According knowledge and literature of the 90's (see e.g. Kagan (1992) Calderhead (1993), Knowles 1994) the efficiency of Teacher Education appears in the beliefs and conceptions of student teachers t.eg:
- how they see learning to teach and to be a teacher
- how they see themselves as learners and autonomous professionals
- how they see the level of their professional development

That above mentioned affects on its behalf directly their professional development and their

behaviour.

The problem in this research is the self-evaluation of the degree and level of student teachers' professional development in terms of students' own experiences in the final practice period.

4. CARRYING OUT EMPIRICAL STUDY

4.1. Data collection

Data has been gathered from the 4th yearcourse students, during their final practice period.The research population consisted of the entire year course (n=80), of which arrived voluntarily 47 student teachers arrived voluntarily to be interviewed. They will graduate as Masters of Arts (M.Ed) at least within one year, or sooner in average.

The interview was carried out by another person, the second evaluator; according to Schütze (1984) as **a social-communicative** process which concentrated on those aspects which constitute the identity of the student teacher. The interview situation was made social interaction, where both parties were speaking and listening. In the first phase respect was established - in the second phase the interviewer was actively listening without interruption. And finally in the 3rd phase the respondent was intended to a more abstract thematization and systematic connection between the parts of reply (see Kelchertermaus et al, 1989).

4.2. The method

The method used here has been influenced by both phenomenology and depth psychology. It related to fields that describe human awareness (Shaber, 1990) A vision we constructed on the basis of literature was scored quantitatively on the 5-point scale. (compare La Boskey 1996)

Based on literature of reflective teaching we wanted to clarify what was going on inside student teachers' minds concerning to their professional development before they finished the preservice program.

The data was classified and reduced into the following (5) five sections.
1. HOW CAPABLE THEY WERE IN CONCEPTUALIZING AND IN ANALYZING their own practice and behavior? How accurate was their self-perception?

2. HOW THEY STUDIED DIFFERENT ROLES: How does a person see his/her own task? How does he/she think other people see him/her?. The accuracy of self-evaluation, self-perception (Rowe & Sykes, 1989 and Fullan) and self-understanding means getting in touch with oneself, sensitivity to one's needs.

3.HOW CONSCIOUS THEY WERE OF THEIR PRACTICAL THEORIES IE becoming conscious of discrepancy between action and aim, between new information and the the action?

4.HOW CAPABLE THEY WERE IN REFLECTION OF EXPERIENCES OR IN UTILIZA--TION OF EXPERIENCES IE becoming conscious of one's own point of view and contribution through reflection.

5.HOW THEY SAW EDUCATIONAL SITUATIONS AS A WHOLE / IN A COMPLEX WAY

THROUGH DIRECTING THEIR OWN PROFESSIONAL GROWTH INTO THEIR WORK, CREATING CONTACT WITH IT AND THE EDUCATION ON A GENERAL LEVEL (=visions of future)

From these previous topics were modified the following questions of interview.

1. Have you succeeded in the final teaching practice in comparison with the earlier teaching practice period and what are you good at, where do you still need guidance?

2. What are your tasks as teacher and what kind of impression of you as teacher do the children and teacher educators get?

3. How have your goals intentions' and activities been in harmony with each other?

4. Do you remember any significant occurrence at school or in the classroom from which you learned in your work?

5. What are you aiming at in teaching at in your own professional development and as an educator?

5. FINDINGS

1. THE ABILITY TO CONCEPTUALIZE AND ANALYZE

There were two extremes on the dimension of analysis: description of events without judgement and rather high level of analysis mostly (not very reasoned).
The lack of analysis and argumentation is indicated by a response like: *"The lessons have gone the way I've expected them to go..*

The rational but superficial attitude, in which the responsibility for success is laid on the children: *"It depends very much on the mood of the pupils - whether they are enthusiastic or not.*

A Realistic, but not overly abstract in its goals was the reply: *"There has formed a sort of healthy routine to teaching. I've had a chance to make the lesson plans according to my own ideas, I've maybe made the goals a little less abstract".*

A thin idea of development: *"Well always, as you, like, progress, you sort of develop anyway, no matter what you do. There has to have happened that sort of development."*

A respondent on the path of development, on the verge of finding one's own line of development and had a need for reasoned analysis when asked how pupils see him/her, answers: *"I hope they see nothing too strict, but I do have a kind of strict line. I don't aim at being anything special. As real ... and as a person who can handle the situations with himself and the kids."*

SUMMARY:
The capability to analyze from their own part was moderate and clearly looking for argumentation in very many answers. Thinking skills had to be trained much more and at least within the

last yearcourse, in small group.

2. ACCURACY OF SELF-EVALUATION (TASK & ROLES)

One-sided is an answer, which tells about the didactic abilities the supervisor should conjure up for the student:*"I like to talk chatter. I'd need help in digesting entities. "* It is progressive to notice one's needs but the unrealistic goals which indicate that self-evaluation is defective.

The next stage of development is characterized by the emphasis being moved to the pupils:*"I now concentrate on how the pupils learn. I don't monitor my own behaviour anymore. It sort of brings about a positive thought of somehow growing in some respect...*The answer reflects partly the discovery of adulthood.

Versatile self-monitoring is suggested by the following answer:*"I am able to retain a positive atmosphere in the classroom. If the situation starts to get problematic then I'm rather certain that I can calm things down by searching for a solution e.g. through humour.* I have learned:*"It is worth while surveying the moods of the pupils, it is a very educative thing. You must be able to be flexible and innovative." "I try to concentrate on the essential. I have always hated rote-learning and insignificant details."*

Keen self-evaluation includes typically linking with personal experiences and categorization of altenative hypotheses, e.g.:*"Well, it's maybe that I feel inside that my work as a teacher has become easier. I've learned to organize and I don't need to use so much time as during the first years. I have a sort of feel to it, I know what works and what doesn't."I've tried to make the goals more concrete and clearer, the amount of time used in teaching has always been a mystery to me because you never know how long an answer to something will take and how long it will take to complete an assignment."*

SUMMARY:
Capability to self-evaluation was moderate, in some of the replies rather keen and sharp.

3. THE EXISTENCE OF A PRACTICAL THEORIES

A typical weak answer is on a relatively **general** level, without an intention to a more particular evaluation of one's action or details of it:*"Yes, I think they (goal and action) have gone hand in hand." That was all!*

On the contrary when the respondent realized what his/her goals are he/she understands how they can be reached: *I hope the kids really see that I truly do care for them...., But I still want to keep a certain distance, so that I can be in control of the situation."*

SUMMARY:
Theories-in-use (a practical theory) are shaped by various sources: mainly personal experiences.Transmitted knowledge is the form of concepts, theories, commonly held beliefs and thirdly values (see Handal, Lauvås), which are the strong determining element in our practical theory. Most of the student teachers in this research had not integrated these elements for a valid basis for action in their own thinking (see e.g. Stenhouse, 1979) and behaving. Also Hutton (1994) and Korthagen (1992) have verified that the use of critical perspectives depends on development of meta-cognitive skills alongside an acceptance of particular ideological framework which not very common during preservice.

As a summary according to the results in this research there is a deficiency in teacher Education in emphasizing and facilitating awareness of the practical theory as a dynamic and ever-changing individual of a collective. Perhaps we ourselves have not consciously made that practical theory accessible and have not confronted the question.

4. THE REFLECTION OF EXPERIENCE - i.e. THE UTILIZATION OF EXPERIENCE

A typical nonreflective reply with no connection to any specific experience: *"Well, nothing very significant has happened during this practice. The only thing that happens all the time is that if you haven't prepared enough and thought everything out. The other student replied: I have no experience that rises above others and none that would have opened my eyes wide or that I would have felt that, yes, that the way it is."*

There was a difference in the answer where the problem was realized but student teacher couldn't process it throughout: *"Generally the negative can remain so deep that I cannot process the experience but I remove it and remove it so that it is really no use to me. I don't know why but I can't anything from them. I sort of hide them and don't even want to think about it."*

In the following the student teacher took a totally different stand and notes situational susceptibility: *"I aim for sensitivity in professional development, so that I could sense somehow what the pupils are like at each time and take that into consideration and also offer the kids thing through their own experiences."*

A most similar ability was manifested in the following answer: *"I've tried to create versatile things to do and learning by doing. The children do things and have experiences. I've been very satisfied with that myself."*

An example in which a chaotic experience may help the student: *"Nobody listened to anything, the whole thing got out of hand. Then I started thinking during the lesson that why is this happening and what I could do about it, but I could get nowhere. Only later did I realize what it was about."*

The realization of how to make pupils susceptible to learning: *" Although they were just first graders they can think themselves if you can create the right atmosphere. Especially in biology and environmental studies I have learned to use the pupils and their own thinking more."*

Processing phase includes working through ones own associated emotions, problematization of events, relating to previous feelings and planning own further learning. High-quality reflection and deliberation during and after lesson: *" ...that pupils can work alone that you don't always need to tell them things or help them. I mean that they also do homework on their own that they aren't overly dependent on the teacher that they can also look for the knowledge themselves, create knowledge themselves. You have to try and solve the problem yourself and only after that fails, turn to the teacher." "When giving lessons I think a lot and deliberate on what I did, did it work and why did I do it? I think of these things both during and after lesson, what the goals were and how they were reached or why they weren't reached and I think of the lesson as a whole or self-evaluation. I'm gonna develop myself as a teacher all the time and try out new teaching methods so that I don't create a routine."*

SUMMARY:
The reflection of experience was the most salient part in their professional development. Perhaps they were used to focus mostly on that, during their education of four (4) years.

5. SEEING EDUCATIONAL SITUATIONS AND EDUCATION ON GENERAL LEVEL (= IE HAVING THE VISION)

The specific intentions very much define the working method (see Boud). When one sees the ideal of independence in children one has most likely chosen the route of a searcher/problem solver and believes in creating knowledge.

A weak answer of educational situation indicates the shifting of responsibility to the future: *"I definitely want some new things, although I think it is worthwhile to be mediocre, not to bounce back and forth. I should find my own style but not from here."*(=institution)

A practice-oriented objective of making pupils balanced - also being able to deal with disappointment, being more than just a teacher: *"I think about what the pupils have done during the weekend which causes the lesson to be chaotic. The pupils backgrounds can never be thought about enough, you have to be able to read the children. I'd like to teach them to deal with disappointments, too, so that they'd grow up to be balanced human beings. I want to be more than just a teacher."* The respondent maintains an interest in the work independently because he/she knows how to look at oneself objectively.

An independent approach in an answer of good standard: *"My aim is that pupils can work alone, that you don't always need to tell them things and help them. I mean that they also do homework on their own, that they aren't overly dependent on the teacher, that they can also look for knowledge themselves, solve problems by themselves, not have answers given to them - problem solving and knowledge seeking"."When giving lessons I think a lot and deliberate on what I did and did it work, why did I do it? I think of these things both during and after a lesson, what the goals were and how they were reached or why they weren't reached. I'm gonna develop myself all the time as a teacher and try out new teaching methods, so that teaching doesn't become a routine and that I could get from each class and pupil new experiences."*

A high-quality answer included also an effort for professional growth so as not to let opportunities pass by without doing anything about them and a high degree of self-criticism: *"In school work I aim at comprehensiveness, that I can see the child as a whole and that everybody is an individual, everybody should be treated individually according to his or her needs. I also think and deliberate. If opportunities arise, I won't let them slip away, but I'll be as critical towards myself as possible"*.

SUMMARY:
When they saw the education on a general level, they linked theoretical thinking and their personal view at the same time. Holistic vision building provides a solid foundation for ones professional growth process.

6. CONCLUSIONS

The conceptualization of a professional teacher was based on the literature of "new professionalism". We see that the readiness to process and translate new information towards inner

wisdom includes at least the following three dimensions:(see figure 1)

When analyzing the learning process of teachers the question of in which dimension to describe professional development arises. As the main factors have been presented the following

1) dimension reflective orientation in many investigations (e.g. Niemi et al, 1995). As a matter of fact, it is a question of **transformation and dynamic** growth by aid of reflection versus steady (static, stale mate) situation. A problematic question is: how to get people, the professionals to inquire themselves? The simple answer to that could be: realiziing experience with the help of reflection, thus creating understanding. Educative experiences make development possible. Teacher's task is to nurture the interaction between internal and external features to make the learning situation educational. The problem, even in teacher education, has been that the internal factors in teaching have been ignored.

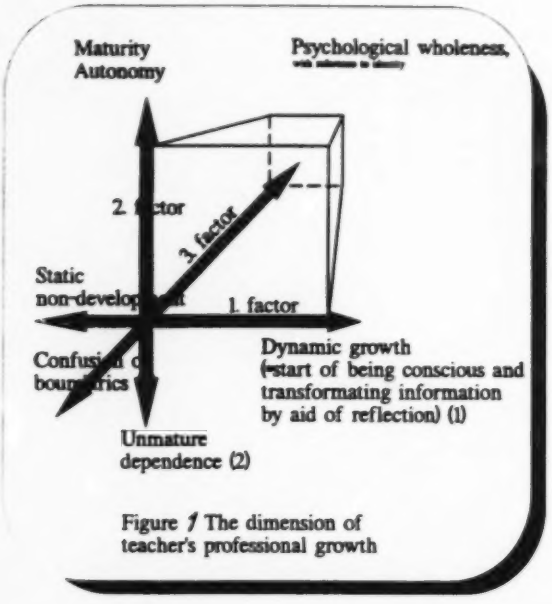

Figure 1 The dimension of teacher's professional growth

2) The second factor is called mature **adulthood & responsibility versus student's dependence** on the others' opinions. The relationship between teachers and students has to be perceived as a continuation of their own experiences in relation to authority. The teacher educator should avoid taking the traditional authority role offered, which would preserve the traditional interactional culture. It prevents the students from changing. There is no use for the teacher educator to refer to student autonomy, if he/she obstructs the use of it by student. (c.f. Dewey educative versus misseducative experiences.) Student autonomy here refers to the critical ability to decide in one's mind about right and wrong and the ability to make choices based on reflection

The teacher's new role requires disregarding of the old, student autonomy suppressing, teacher culture and adopting consciously of a new role, in which student autonomy is comprehensively supported. This type of a new role prerequisites changes in teaching strategies, like the teacher-student relationship and the teacher education curriculum. The tutor is no longer the model of a master teacher. Instead a reflective tutor can offer a person to identify oneself with; with the

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help of whom the student may want to get to know his/her unknown side and thus create room for the development process. However, psychological growth is typically continuous as well as incomplete.

3) As the third factor is seen the integrity of self towards the development of **self-identity, psychological wholeness**. From the identity point of view the clarity of boundaries, internal and external worlds are essential. Clarifying the borders makes room for the inner world. Thus it also grows, develops and comes into use as a conscious feature, categorizing itself to the individual and being in contact with the outer world. This is a model that takes seriously the need to change as first step people's basic understanding of themselves and their world as the first step. To develop in a profession, one has to have internalized one's identity. In the process the task has to be constantly redefined, so that the process will continue. Tasks tend to draw attention away from it.

The joint effect of the above-mentioned three dimensions is 'caring', adult giving/receiving. The envy and greed typical for childrens' development are replaced by generosity, compassion and sharing, the child-parent relation matures and expands to include other people, too. Helping others is of utmost importance to student teachers. Adult caring is not motivated by greed but by gratefullness and collaboration.

Professional development has taken place when a person notices that he/she thinks and acts differently, accepts him/herself and has a less anxious attitude towards other people and things. As a person gives up anxiety the energy can be redirected into studying new things. In professional development there are both the depth and width dimensions i.e. the interaction between the core task and the basic skill and its extent. In other words the capability and wisdom, which appear in applying reflective thinking teaching. The objective of professional development can be chrystallized as follows: Student-based pedagogics of ability and the basic readiness of entrepreneurship (compare Eisner, 1993).

Finally we would like to emphasize the following principles in teacher education on the basis of the findings of empirical study:
1. Consider that the term of reflection should pervade all program courses and field experiences, Barnes (1987) too, and should be sequentially developed over the course of the program, otherwise it undercuts our efforts and purposes. The problem is different inside colleges of education and faculties, where commitment to a coherent program is required.

2. Secondly: Strong commitment to the process of development means: to continuously articulate one's inner thoughts by searching for reflection on action and about action and one's own experiences. This means entering an individual process, the form , nature and the speed of development of which, cannot be determined or known in advance. It could be generally described as follows:

Thirdly: The capability to learn to analyze and conceptualize problems by studying and inquiring about one's own work. It also means the ability to identify problems and to find creative solutions to one's own problems and the capability to endure the uncertain situations until one knows, to rely on one's own competence to find solutions, to have confidence in their own reflection, experiential learning (understanding), sensitivity to what is going on in that given situation and context and the realization of understanding and becoming conscious of it.

4. Fourthly: Student teachers need to be strongly supported in active and dynamic learning &

4. Fourthly: Student teachers need to be strongly supported in active and dynamic learning & inquiry from the moment they enter the Teacher Education program. Beginning to be an inquiring teacher is to begin to plan professional growth. The inquiry begins when they firstly ask themselves questions such as "What do I know about teaching and schools? "How was the teacher like, who influenced me?" or "What are my most significant learning experiences?"Professional development is described as gradual changes during preservice in the behaviour, knowledge, image, beliefs or perceptions of student teachers. In final practice it should reach a certain level. It is no longer a privately pursued extra but an openly implied part of teacher's regular work as Day expresses it (1993).

5. New professionalism should include "new conceptual framework" (Calderhead, Gates, 1993). The most problematic seemed to be the personal touch with one's own practical theory (theories-in-use), which is so embedded into the way we think that it is very hard to articulate. Making a personal public link is found difficult (compare Sarah Tann, 1993). Articulating ones experiences or conceptualizing one's comments is, however, the key element that needs to be addressed and focused on in initial teacher education. Also space has to be given to it. We really need to replace the theory as a content by "theory as a process" by reference to one's own ideas. Offering taken-for-granted theoretical knowledge has been doomed to be of no value. It is no more valid in Teacher Education. Otherwise we cannot be ensured that teachers are capable of taking responsibility for their own professionalism.

We see the spiral of professional development as well as for example Pollard et al,1990: there is a constructive relationship between the state of teacher (classroom) competence according to the other tests and the processes of reflection through which competence is developed. Learning should be a living process of being awake - a series of creative steps in awareness. Unfortunately, there was a rather great difference in replies - however the majority of half was on average, less than one quarter had enormous answers, scored in points 4-5 to enable student teachers to analyze and evaluate their own practice. The second aim of the reflective teaching program of Calderhead, page 2, was to encourage them to greater responsibility for their own professional growth and lastly to empower teachers to better influence future directions, particularly their own intentions. The principle of facilitating teachers' awareness of their practical theories (theories-in-use) was difficult to realize. To learn to utilize their experiences, making sense of them or turning the experiences into learning (compare Boud) was much easier to them.

6. Closer examination reveals that there are **different paths** (Ojanen, 1993, a) in student teachers' development. To some of the student teachers developing cognitive aspects is more natural and more easily leads to conceptual progress. Another aspect of complexity is that teachers **sometimes** appear to digest quite large amounts of information (Calderhead, 1987). It means that they are occasionally aware of complexities in particular moments, i.e. recognise and relate these to their own experiences. Particularly dangerous it is when the teachers are not at all aware of his/her affective experiences influencing his/her behaviour above all in a conflict between teacher and pupil, then the teacher loses his/her adulthood.

The critics of this analysis lean on the virtues and judgement of professional evaluators. We have started here from Shaber's principle that teacher educators need information which the public professional will gather and transmit to them, so that they might process it and move ahead in the performance of their duties (Shaber, 1990). The professional in this model is not functioning as a tool of authority thinking: evaluation here asserts that imperfect though this may be, it ultimately is the best method available. Most approaches investigating teachers's

cognitions emphasize that their verbal reports or (here replies) correspond with teachers' thought processes. Of course, there are a number of factors that might affect the reliability of the answers. More reliability allows here that, what we have been searching for is: their own understanding, the awareness they have expressed. The answers are not only an abstraction or reinterpretation of the experiences of the student teachers. They have been stimulated in interview to reach for a significant experience., which does not reveal much about the content of the concept. The interest in the research on the orientation situation has been vast, but there is a need for research work with emphasis on theories and methodologies. We will have to construct orientation programs for university level education, especially for scientific post-graduate education.

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